

Mailed Date: June 28, 2003
Filing Due Date: August 28, 2003

NOTIFICATION FOR FILING OPINION

Applicant name: Kabushiki Kaisha Toshiba

Application No.: 10-2001-0037087

Title of Invention: An electric fuse, in which the dielectric strength is controlled by injecting impurities into the insulator film of the capacitor structure, and a method of manufacturing the electric fuse

As the result of examination of the present application, the following reasons for rejection have been found and notified herein under Section 63 of the Patent Law. Any opinion about the rejection [Form 25-2 attached to the Regulations under the Patent Law] or any amendment [Form 5 attached to the Regulations under the Patent Law] must be filed by the above date. (The above date is extensible by one month for each request. No notification of allowing extension of time will be issued.)

[Reason]

Regarding the invention described in claims 1-18 of the present application, in the technical field the invention belonged to before this application, a person skilled in the art can easily provide the invention using the references below. Therefore, the present invention is unpatentable under the provision of the main sentence of Section 29 (2) of the Patent Law.

[Note]

The present invention is related to an electric fuse which has a capacitor structure. The present invention can be easily provided by a person skilled in the art from the manufacturing method of the anti-fuse that forms the second electrode after forming an amorphous silicon on the first electrode (US Patent No. 5,783,467 [July 21, 1998]), the structure of the anti-fuse that decreases the resistance by diffusing the atoms from the metal electrode to the

amorphous silicon (US Patent No. 5,793,094 [August 11, 1998]), and the method for forming programmable elements with program features of the anti-fuse improved by using the diffusion layer (Jpn. Pat. Appln. KOKAI Publication No. 5-343528 [December 24, 1993]).

[Attachment(s)]

1. Jpn. Pat. Appln. KOKAI Publication No. 5-343528 (December 24, 1993)
2. US Patent No. 5,783,467 (July 21, 1998)
3. US Patent No. 5,793,094 (August 11, 1998)